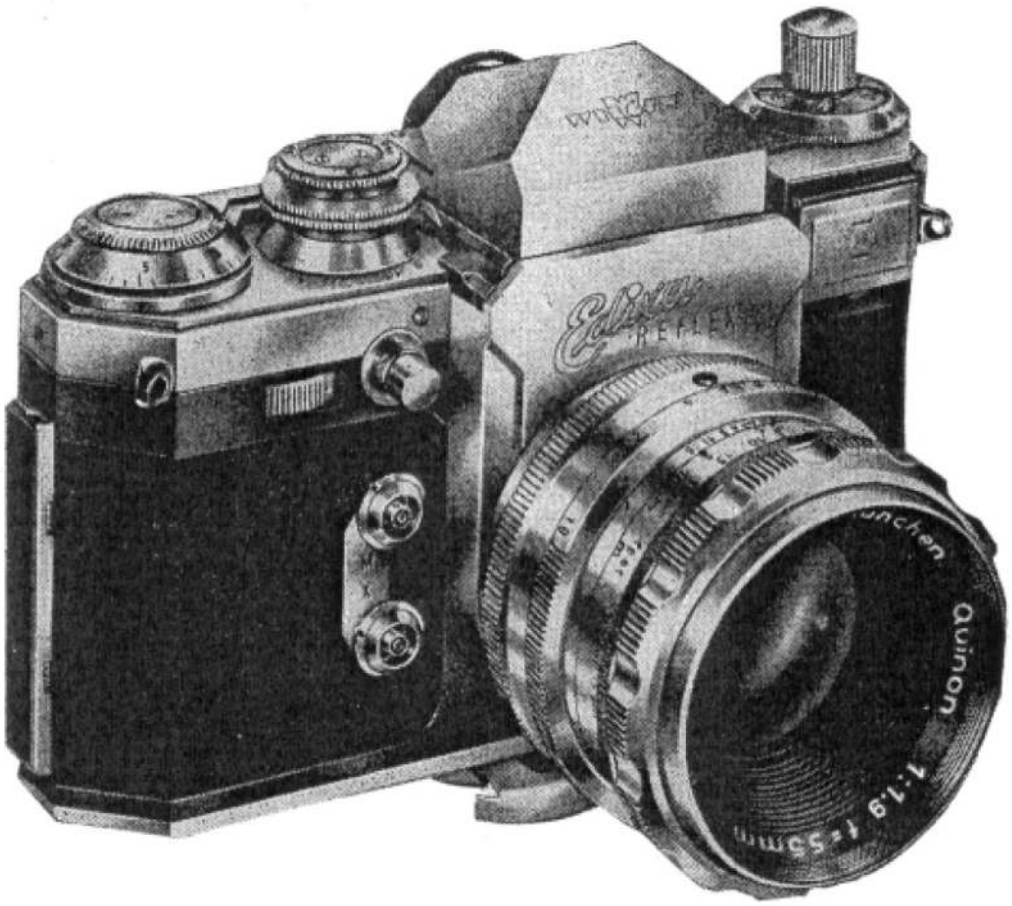
Gebr. Wirgin Wiesbaden
Edixa Reflex



Klaus-Eckard Rieß,
Opnæsgard 53, 2. tv, DK-2970 Hørsholm, September 1959

Model A:	without aperture release
Model B:	with aperture release
Model C:	with exposure meter
Model D:	with self-timer
Model flex:	without internal release, without long times
Model standard	

1. Transmission

If the shutter axle has been removed, it must be turned to the left as seen from below when it is put back. Turn it to the left as far as it will go when viewed from below, and
Insert the control shaft in the position shown.

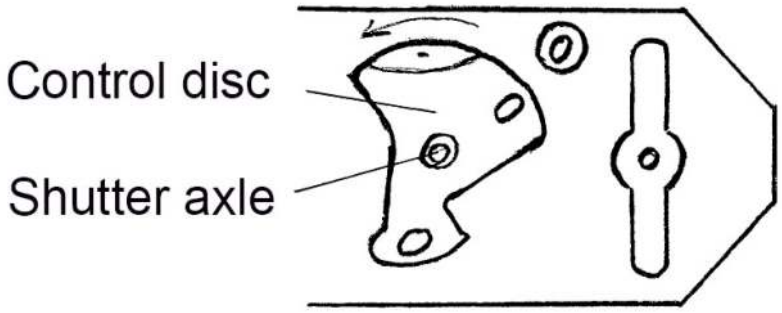


Figure 1: Inserting the shutter axle and the control disc

Next, insert the winding wheel, engage the locking lever in the winding wheel and turn the winding wheel on the film drum as far as it will go (see Fig. 2).

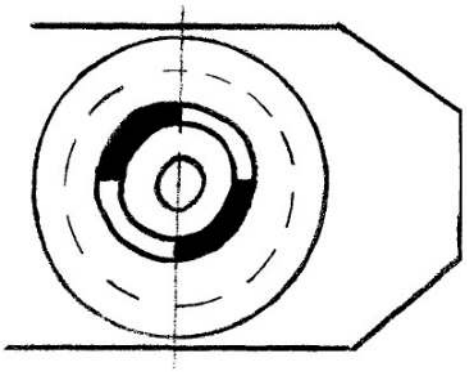


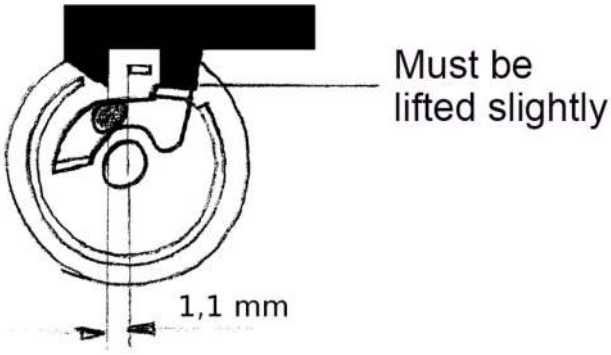
Figure 2: Winding wheel and film drum

In the next step, insert the intermediate wheel, engage the locking lever in the winding wheel and and turn the toothed wheel to the right as far as it will go (see fig. 3), i.e. until it touches the pawl and the pawl begins to be lifted out.

Now turn the shutter axle to the right as far as it will go when you press the shutter release, the pawl in the shutter axis must still lift the locking lever a little. There must be a gap of 1.1 mm.

Now put on the shutter wheel and tighten it with the cam in the sketched position.
The cam must point to the nose on the locking lever, with the locking axle and the gearwheel turned to the right against the stop.

Then screw in the stop angle, turn the gear wheel and shutter wheel in opposite direction.



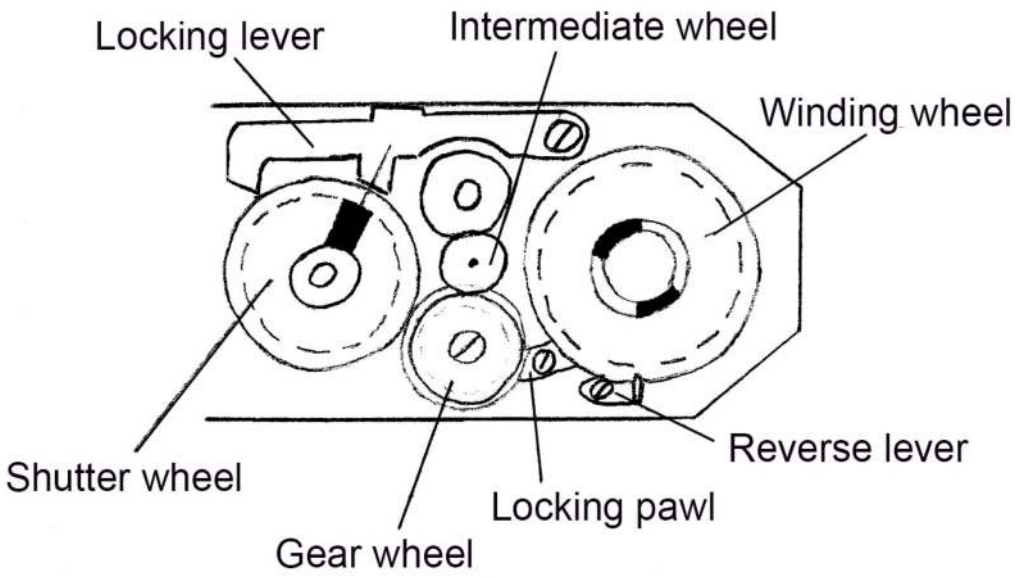


Figure 4: Gear

Turn the gear wheel and shutter wheel in opposite directions (wind up) and turn the quick-release lever
in the sketched position (see figure 5).

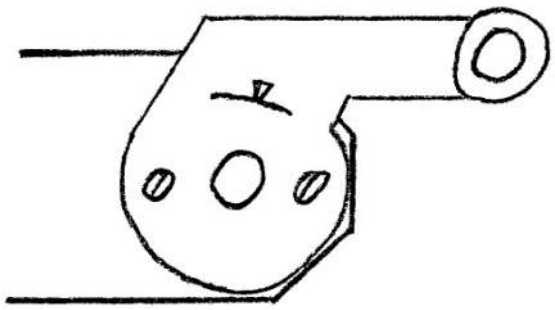


Figure 5: Putting on the quick-release lever

Make sure that the gearbox always retracts after turning back the shutter wheel.
of the shutter wheel, it must always be possible to wind it up again.

2. Inserting the curtains

First set the quick-release lever to the wound-up position, then insert the curtains with the rollers on the shutter in the wound-up position.
Next, insert the tensioning rollers and pretension them by about 5 turns.
of the tensioner. The first roller blind must have more tension than the second.

The two ends of the roller blind should lie on top of each other, so far that the two slats just overlap.
The roller blind axles on the shutter must not have too much room to move, approx. 1/10 mm to 2/10 mm. The cogwheels of the axles should also have hardly any room but they must not wobble either. This is achieved by bending the bearing bridge. Tighten the screws!

If you let the first roller blind run down and brake the second one with your finger, it must run through on its own.
If you pull the quick-release lever as far as it will go, the roller blinds should hardly move when you pull them over.
The adjustment is made by the collapse of the locking fork and by the space between the gear wheel of the roller blind axle (synchro) and the shutter wheel.

3. Adjusting the lift and the shutter

When tensioning the quick-release lever, the shutter wheel must be wound up to the stop.
The locking lever must be well engaged (try it twice) and not
try twice) and must not have too much room (test on the film drum).
The play is adjusted by filing the stop pins of the gearwheels.

When checking the room of the film drum, the backstop lever must not skip a tooth.
It is adjusted by moving the quick-release lever by one tooth.

The backstop should only engage when the last light pressure is applied to the quick-release lever. This is achieved by bending the backstop (bridge).

3.0.1 Winding order

When the winding lever is pressed for the last bit, it should engage one after the other:

1. locking lever
2. locking fork
3. backstop

3.1 Adjusting the shutter

For "B", the roller blinds on both sides must be distanced as far as possible and evenly from the edge of the image field.
If you release the shutter at the locking fork and hold on to the control disc, you will see the slit between the blinds. At 1/1000 sec. this should be 1 mm -
1 1/2 mm (exactly 1.3 mm) wide; at 1/500 sec. 2 - 2 1/2 mm.

The width of the slit is adjusted by shifting the roller blind axles by one tooth or by pulling and bending.

When the blinds are wound up, they must have a 3/4 to 1 slat width overlay, i.e. they must overlap by that much.
Adjustment is made by sticking pieces of tape onto the axles or by
cutting away.

3.2 Checking the coupling

Hold the timing knob, press the release button, release the locking fork and
slowly release the timing knob. As you do this, the first roller blind will slowly advance and when it covers the second roller blind by only 1/4 - 1/2 slat width,
the second roller blind must follow.
The setting is made by bending the locking lever (screw on the stop for this purpose).

3.3 Most common error at 1/1000: stripes in the image field

A stripe in the image is caused by inhibitions in the running of the tapes, rollers or the synchronisation, or by uneven running of the tapes on the rollers.

The error can be eliminated by running the rollers as smoothly as possible.
If necessary by regulating the tension (relaxing the tension leads to a prolongation of the shutter speed).
The inhibitions caused by synchronisation should be kept as small as possible.
Sticking something on the roller blind axles (to compensate the slot width).
Take test shots!

4. Synchronisation

The flash contacts are actuated by the tape axis with the curves.
It is important that no contact is triggered when winding up.
"M" should give contact when the 1st curtain is exactly in the centre of the of the picture field, i.e. the shutter is half open. With all models (1) "M" shall give contact before the shutter is opened.
"X" should give contact when the shutter is fully open.
The best way to check this is to let the speed dial wheel run down slowly.
The test must always be carried out at 1/25!

Rough adjustment is made by turning the curve rings on the axle (secured with worm screws).

Fine adjustment is made by
Bending and filing the curves and synchro levers.
Position of the synchronous curves when wound up:
When running down, the upper curve runs once around and then lifts (when the 1st curtain is in the middle) lifts out the synchro lever, which gives contact.

The lower cam only moves until it hits the brake spring.
It is then taken along again by the stop of the middle ring and makes contact, when the shutter is fully open.

(1) up to production number 169 500

Figure 6:
Curve and lever for "M" (top) Curve and lever for "X" (bottom).

The flash must illuminate the whole picture with "X".
Check with slit at the edge of the picture border

5. Mounting the mirror box

The control disc in the camera base must be adjusted in such a way that, with the shutter wound up (with space), the drive lever can move freely past the control disc.

The release lever on the mirror box must move easily and without hanging.

For assembly, the shutter and the mirror box must be wound up and the mirror box can be inserted. (caution: do not bend the synchronisation!).

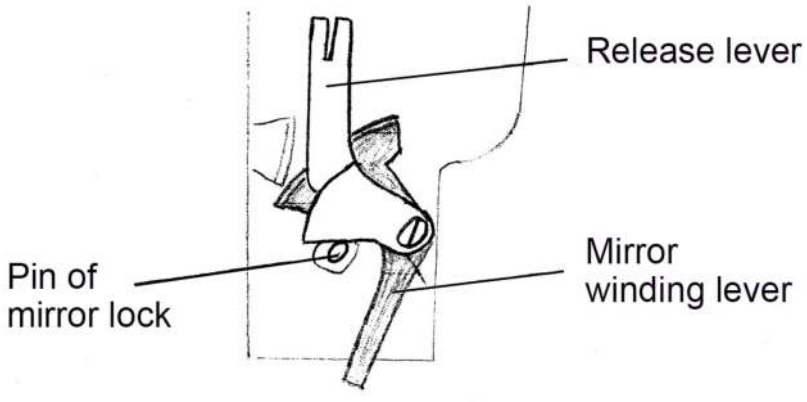


Figure 7: Mirror box activation

When winding up, the control disc winds up the mirror winding lever via the driver lever. The mirror folds down, the mirror stop falls in, the curve disc releases the driver and and the mirror snaps back to the stop (after a short overtravel).

When the shutter is released, the nose of the shutter slide presses on the release lever of the mirror box. First, the inner release is released, then the
mirror flap, the mirror winding lever snaps back with the mirror
and when the mirror is almost up, the locking fork is pushed back by the mirror winding lever and releases the shutter.

The shutter must not release until the release button is almost fully depressed,
and there must be some space This is adjusted by
bending at the mirror box.
The mirror box is fastened to the housing with 3 screws, 2 from below, 1 from above.
From the side, 2 worm screws are only slightly screwed in for support.

By bending the mirror box winding lever you can adjust the space of the mirror.
Likewise, if the curve disc hangs on the lever while winding (file the curve disc if necessary).
The mirror is adjusted to 45 degrees on the lever for the mirror stop -.
The flange focal distance is 45.5 mm, measured from the film plane to the centre of the lens screw ring.
The adjustment is made by means of spacers.

6. Long-time mechanism

The travel of the escapement is adjusted from the long-time adjustment ring by means of a curve, a feeler lever and a crescent lever.
At "0" the escapement movement is completely switched off
and the shutter runs on short times.

When the shutter is released, the curve disc is held open by the brake lever until
the escapement has run down and the control disc is released by the brake lever.
The times are adjusted by moving the escapement mechanism and bending the lever
and, if necessary, by adjusting the spring tension of the brake lever.

When winding, the brake lever must move well between the slotted nut and the curve disc.
When releasing and holding the shutter open in position "B", the brake lever must be able to move freely through the lugs of the control disc.

(see figure 8). For this purpose, the control disc may have to be moved or re-filed.

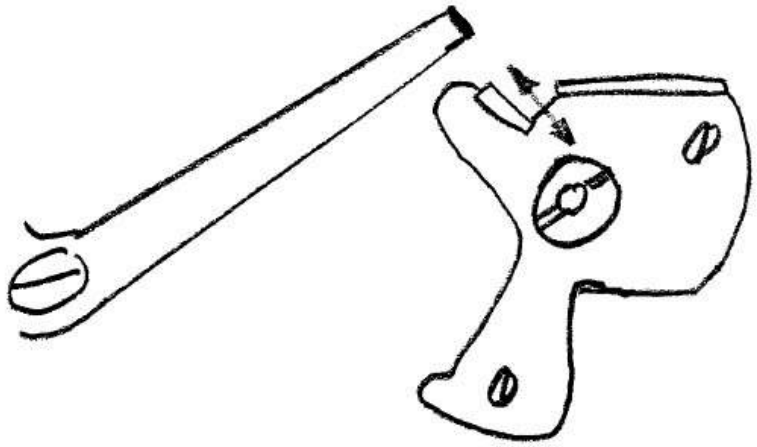


Figure 8: Brake lever and control disc long-times mechanic

The brake lever must drain slightly at the noses of the control disc.
check.
Due to infrequent use, the bearings of the long-times mechanic can get sticky
over the years. This leads to prolonged shutter speeds or even to temporary standstill of the long-times mechanism. In this case the shaft journals must be
cleaned and oiled.

7. Edixa-Reflex D (with self-timer mechanism)

If the mirror box is to be removed, the self-timer mechanism must also be removed beforehand.
To do this, unscrew the rewind knob, remove the film setting disc
(secured by a snap ring), unscrew the setting ring and unscrew and lift off the cover.
Then unscrew the large slotted nut inside the housing and remove the self-timer.

The lever screwed flat to the mirror box locks "B" (for times over 1 sec.). The other two levers lock the mirror release while the self-timer is running.

For your attention

==========

The models B/L, C/L, D/L, S/L and Flex B/L are
equipped with linear speed range.
The cameras now in your hands have undergone some changes that are
not listed in the enclosed instruction manual, and which we ask you to pay
special attention to.

The speeds are now as follows:
1 sec. - 1/2 - 1/4 - 1/8 - 1/30 - 1/60 - 1/125 -
1/250 - 1/500 - 1/1000~sec.
(For model S/L up to 1/500 sec., for Flex B/L 1/30 - 1/1000~ ec.)

The table for flash photography remains unchanged with the following
exceptions:
a) instead of 1/25 sec now 1/30 sec, instead of 1/50 sec
now 1/60 sec, instead of 1/100 sec now 1/125 sec;
b) when using electronic flash units,
speeds of 1/60 sec and longer (e.g. 1/30 sec) can be set, in which case the
X-contact must be used.

In the operation of the camera itself there are no differences between the
camera and the types listed in the enclosed instruction manual, and all
accessories offered in our product range can also be used.

The above-mentioned models S/L and Flex B/L are only available for some
specific export markets.

Kamerawerk Gebrüder Wirgin
Wiesbaden